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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,390	09/18/2000	Frank Notaro	20846	4737

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EXAMINER

SPITZER, ROBERT H

ART UNIT	PAPER NUMBER
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1724

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DATE MAILED: 12/12/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/664,390**

Applicant(s)  
**Notaro et al.**

Examiner  
**Robert H. Spitzer**

Art Unit  
**1724**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 20) ☐ Other:

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### DETAILED ACTION

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

2. On Fig. 7, there is <sup>M</sup>o description in the specification of the following reference designations: A1, A2, B1, B2, C1 and C2.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 indefinite because part (c) recites "at least one pressure source" without any correlation to "the same pressure source" recited in line 3. Claims 5 and 6 are indefinite because they recite "at least one pressure source" without any correlation to the identical recitation in part (c) of claim 1. Claim 7 is indefinite because part (c) recites "at least one pressure source" without any correlation to "the same pressure source" recited in line 3. Claims 8 and 9 are indefinite because they recite "at least one pressure source" without any correlation to the two recitations of "pressure source" recited in claim 7. Claim 11 is indefinite because part (d) recites "a common pressure source" without any correlation to "the same pressure source" recited in line 3. Claim 16 is indefinite because there is no direct antecedent basis for the recitations of

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“said high pressure source” and “said low pressure source”. Claim 20 is indefinite because in line 3, it is not known to which “pressure source” the recitation of “the pressure source” refers, as claim 11 recites both “a common pressure source” and “the same pressure source”. Claims 2-4, 10, 12-15 and 17-19 are indefinite because they depend from the above indefinite claims.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the device of Smolarek et al. (5,759,242), wherein 13 to 35% of the adsorbent volume is contained in the inlet and outlet header volume. Also, the header volume can be as low as 3%.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smolarek et al. (5,759,242) in view of Rouge et al. (5,968,233). The claims differ from the device of Smolarek et al. ('242) in each inlet and outlet line for the adsorber including a valve. Rouge et al. ('233) show the mounting of valves on their inlet and outlet lines. It would have been obvious to

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one ordinary skill in the art, at the time the invention was made, to provide the inlet and outlet lines of the adsorber of Smolarek et al. ('242) with valves therein, in view of the showing of Rouge et al. ('233), so that the flow of gas to and from the adsorber can be controlled, so that the VPSA process can be maintained.

9. The remaining references listed on the PTO-1449 and those cited on the PTO-892 show art of interest.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Spitzer whose telephone number is (703) 308-3794. The examiner can normally be reached on Monday-Thursday from 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Simmons, can be reached on (703) 308-1972. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Robert H. Spitzer/af

December 10, 2001

*Robert H. Spitzer*  
ROBERT H. SPITZER  
PRIMARY EXAMINER  
T.C. 1700  
December 12, 2001